

REMARKS/ARGUMENTS

Claims 31-61 are pending.

Claim 61 finds support in Claims 31, 35, 41 and 51.

While Claims 55-59 have been withdrawn from consideration they have been retained for the purpose of the Examiner rejoining the non-elected species.

No new matter is added.

The Examiner has maintained the elected claims as obvious in view of the combination of Polegato and Rechlicz. The Examiner finds that Polegato teaches an upper microporous layer among other features but does not teach that at least one of two surfaces of the upper microporous layer has a coating formed by plasma deposition treatment. Thus, reliance is placed on Rechlicz for their teachings pertaining to moisture vapor permeable coatings to conclude that one would have used such a coating in the construction of Polegato. Applicants respectfully disagree and note there are numerous errors in the interpretation of the claimed invention and the applied references.

The Examiner maintains that layers 222b and 222c have a structural role as the layers provide for a “cushioning effect” citing para [0068] - [0071]. However, these paragraphs are silent as to this “cushioning effect.” Indeed, ¶ [0069] merely states that “an increase in the absorbing capabilities of the membrane... is achieved”. The Examiner erroneously interprets the absorption of moisture with absorption of impact from a user’s foot. Not only are these paragraphs silent to the ‘cushioning effect’ they are also silent to any structural functions provided by these layers. Should the Examiner be relying on the theory of inherency, it is a well applied principle of U.S. law that establishing a case of inherency rests soundly on the PTO and the PTO must explain why the alleged features are inherent in the cited art. Such

has not been done and therefore the Examiner position, while not only incorrect, is unsupported.

While Applicants understand that, during the prosecution of an application in the Office, claims are to be given their broadest reasonable interpretation consistent with the teaching in the specification (*In re Bond*, 710 F.2d 831, 833 (Fed. Cir. 1990)), it is error to disregard express limitations in the claims. The Examiner may not set up a “strawman” claim and reject it rather than subject matter encompassed by the actual claims.

The plain language of Applicants’ claims requires “a first structural layer is a lower layer provided with a supporting structure so as to form a tread” (cf Claim 31). The present specification consistently defines at pg. 6, lines 6- 10 of the present application it states that “the lower layer 14 has a supporting structure so as to form the tread of the sole 10, while the zipper layer 15 forms the foot supporting base. The term “structural layer” should be interpreted with reference to the description and not be given an arbitrary or an unreasonably broad definition as done by the Examiner in the rejection.

A layer can have a cushioning effect and yet be devoid of a structural role. The layers 222b and 222c are not capable of providing a structural role if not for the presence of “other element wronged between the foot and the membrane (insole, supports located outside the membrane).” The layers 222b and 222c would not be able to support a foot of a user on their own as they disclosed as being nothing more than hydrophobic or hydrophilic layers.

The Examiner has also equated that the lower layer of pending claim 31 to the tread 13 of Polegato and states that the upper layer is provided by layers 222b and 222c citing Fig 3bis from Polegato. However, as noted above layers 222b and 222c do not have a supporting function. Further, the Polegato does not teach “portions (14a, 114a) that are open onto said upper layer (15, 215).” Paragraph [0065] states with reference to Fig 3, that it is an insert wherein a felt layer 222 is provided over the membrane 215 and protective element 216. This

structure is duplicated in Fig. 3bis cited by the Examiner with the exception that the filler layer has three layers 222a, 222b and 222c. Nevertheless, all the three layers 222a, 222b and 222c are provided above the membrane 215a and protective element 216a. The inserts are provided on the tread 13. Thus in Polegato, the portions of the tread 13 are only open onto the protective element 216, even in the embodiment of Fig. 3bis and not on any of the three layers 222a, 222b and 222c. Rather, in the pending claim it is clear that the portions are open onto the upper layer.

The Examiner has not provided any basis or simply misinterprets the salient teachings as this aspect of the claimed invention is clearly not taught by Polegato.

As Polegato does not disclose that the layers 222b and 222c have structural functions nor does the tread open onto the layers 222b and 222c (defined by the Examiner as the upper layer), the only way the Examiner could have reasonably come up with the claimed invention based on the citations is improper reconstruction of Polegato. The requirement of the supporting structure and the lower layer having portions open onto the upper layer is not in Polegato and appears to have been gleaned from the present application, which is plainly improper.

The Examiner has maintained that Rechlicz teaches “a coating (21,221) obtained by means of a plasma deposition treatment for waterproofing.” The Examiner has simply stated that Rechlicz discloses that it is desirable to provide a moisture vapor permeable coating of hydrophobic polymer on one side of a sheet of microporous matrix material.

As a first point the microporous matrix material having the coating is not capable for providing a support function as it only has a thickness of 30-400 microns. Rechlicz, in fact, teaches bonding the microporous material to a layer of porous material (col. 15, line 44 - col, 16, line 15). Thus, Rechlicz teaches away from the pending claim 31 wherein the coating is provided on the upper layer which has a structural function.

As a second point, Rechlicz teaches that the coating is provided on a very specific type of microporous layer. In fact, the microporous material is initially hydrophobic which becomes hydrophilic upon contact with water (col. 1, lines 61-63). Polegato only discloses that the layer 222b is made of hydrophobic material and that layer 222c is made of hydrophilic material. Polegato does not disclose that the layers are able to change characteristics. Thus, the skilled person would not consider applying the hydrophobic coating to the layers 222b and 222c which do not start out as hydrophobic layers and then become hydrophilic.

Further, Rechlicz teaches that the hydrophobic coating works in conjunction with a microporous layer that is acting as a wicking agent. Thus, even if the skilled person were to combine the hydrophobic coating of Rechlicz with Polegato, that skilled person would have added the coating to the layer 222c, which is hydrophilic, instead of layer 222b, which is hydrophobic.

Indeed, such a combination would result in a reduction in the capacity of the shoe of Polegato. According to Rechlicz, the coating should be provided on a side of the layer 222c (identified by the Examiner as an upper layer and which is hydrophilic). Thus, the moisture would have to travel through the layer 222c, the hydrophobic coating and the membrane before exiting the tread through the holes in the tread. This would severely reduce the transpiration capacity. In fact, the hydrophobic coating of Rechlicz is entirely redundant in the shoe of Polegato in view of the presence of the membrane because in Rechlicz the hydrophobic coating is required in the coated article as it does not teach applying the coated article to a membrane.

Thus, in view of the redundancy of the coating due to the presence of the membrane, the skilled person would not seek to apply the coating of Rechlicz to the shoe of Polegato and

also because such a combination would actually reduce the transpiration capacity of the Polegato's shoe.

The teaching of Polegato is not compatible with that of Rechlicz. Polegato teaches that the layer 222b which is hydrophobic is positioned above layer 222c which is hydrophilic, to propel moisture towards the layer 222c (para [0070]). Thus, the skilled person is taught that the hydrophobic layer should be positioned above the layer 222c in accordance with the teaching of Polegato.

The teaching of Rechlicz provides that the microporous layer acts as a wicking agent to increase the transport of moisture to the hydrophobic coating (col. 1. lines 63-6 5). Thus, the skilled person is taught that the hydrophobic layer should be positioned above the layer 222c in accordance with the teaching of Rechlicz.

Thus, in view of the incompatible teaching the skilled person would not seek to combine Polegato and Rechlicz.

Regarding claim 35 (see also new Claim 61), the Examiner does not provide any basis to establish a *prima facie* case of unpatentability for the claim limitations. Claim 35 requires that "upper layer (15,215) and said lower layer (14,) are joined hermetically along their perimeter in order to avoid water infiltrations." The combination suggested by the Examiner of the sole structure of Polegato and the hydrophobic coating of Rechlicz on the layers 222b or 222c of Polegato, does not introduce a watertight union between a lower layer, represented by the tread 13 of Polegato, and the upper layer.

Such infiltrations, in fact, in Polegato are already addressed by the membrane 15 which if were not present, water would enter easily into the footwear in view of the absence of a watertight union in the tread of Polegato. Polegato, in fact, does not teach to seal the layers 222b and 222c to the tread of Fig.3bis.

Regarding claim 51 (see also new claim 61) that recites that “the precursor material of the plasma deposition is an oil- repellent and water-repellent fluoropolymer,” the Examiner once again makes no attempt at explaining any basis for why this claim is included in the rejection as is required. Indeed, the combination of cited art does not teach a plasma which originates from a precursor material of an oil-repellent and water-repellent fluoropolymer.

Regarding claim 41 (see also new claim 61) requires that “said lower layer (14) is constituted by a perimetric skirt (16) that constitutes the outer edge of said sole (10), and by ground contact elements (17), which are designed to support said upper layer (15,215), the spaces of said lower layer (14) comprised between each one of said ground contact elements (17), and between said ground contact elements (17) and said skirt (16), forming said portions (14a, 114a).” There is no purported basis for why this claim is obvious in view of the cited art and as such the rejection on this claim cannot be sustained either.

The structure of the sole of Polegato comprises a lower layer constituted from a tread 13 having holes and Polegato is completely silent as to a perimetric skirt which constitutes the external edge of the sole and as to the ground contact elements.

After considering the above discussion, Applicants request that the rejection be withdrawn.

A Notice of Allowance is also requested.

Respectfully submitted,

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